

The Global Ageing Trends for Elderly Service and Management: Tales of the Declining Birth Rates

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ABSTRACT

Between 2015 and 2050, the proportion of the world's population over 60 years will nearly double from 12 percent to 22 percent. By 2020, the number of people aged 60 years and older will outnumber children younger than 5 years. In 2050, 80 percent of older people will be living in low- and middle- income countries. The pace of population ageing is much faster than in the past (Stein J, Schettler T, 2008). A report by the Productivity Commission on An Ageing Australia says that Australia is facing a major slowdown in its growth in national income per capita and productivity outlook at the same time that ageing will start to make major demands on the budgets of all Australian governments. This paper looks into how communities can influence healthy ageing the visible presence of supportive physical and physical environments for the elderly and to address most of this demographic shift. The literatures gathered will give a better understanding that healthy ageing suggests a longer life which brings with it opportunities, not only for older people and their families, but also for societies as a whole. Additional years provide the chance to pursue new activities such as further education, a new career or a long-neglected passion.

Keywords: Ageing and health, cloud tourism smart cities declining birth rates

I. INTRODUCTION

1.1 The Ageing Population

People worldwide are living longer. Today most people can expect to live into their sixties and beyond. Every country in the world is experiencing growth in both the size and the proportion of older persons in the population. The global networks suggest that by 2030, 1 in 6 people in the world will be aged 60 years or over. (Stein J, Schettler T, 2008). In Year 2020 alone, the share of the population aged 60 years and over will increase from 1 billion in 2020 to 1.4 billion. By 2050, the world's population of people aged 60 years and older will double (2.1 billion). The number of persons aged 80 years or older is expected to triple between 2020 and 2050 to reach 426 million. (Kruger, Hunter et al, 2005).

This shift in distribution of a country's population towards older ages – known as population ageing – started in high-income countries (for example in Japan 30% of the population is already over 60 years old), it is now low- and middle-income countries that are experiencing the greatest change. By 2050, two-thirds of the world's population over 60 years will live in low- and middle-income countries. (Kruger, Hunter et al, 2005). The common health conditions associated with ageing are hearing loss, cataracts and refractive errors, back and neck pain and osteoarthritis, chronic obstructive pulmonary disease, diabetes, depression and dementia. As people age, they are more likely to experience several conditions at the same time.

II. RESEARCH METHOD

The methodology of this paper uses applied research from the studies conducted by The Centers for Disease Control and Prevention's (CDC's) Healthy Aging Research Network (HAN) (www.cdc.gov/aging/han/index.htm), which works to better understand place-based determinants of healthy aging and translate findings into practice and policy, is well-positioned for such work. It has member centers from seven US academic institutions, other university affiliates, and community, state, and national partners working to advance science toward action and policy in support of healthy aging (www.cdc.gov/aging/han/map.htm).

III. DISCUSSION

3.1 What Is the Healthy Aging Research Network?

HAN conducts research, develops and evaluates initiatives promoting healthy aging, and translates and disseminates science into sustainable, evidence-based public health programs and system-level strategies. HAN focuses on communities and populations that have a disproportionate prevalence of illness; consistent with US law, HAN does not use federal funds to directly or indirectly influence federal, state, or local legislation. HAN recognizes the importance of environmental facilitators and barriers to healthful behaviors and community engagement in the healthy aging process. Its work, as depicted in a modified

3.2 Han Action Framework

The Framework in Figure 1 reflects a distinct pattern of transition from applied research to translation, with the goal of informing practice and policy.

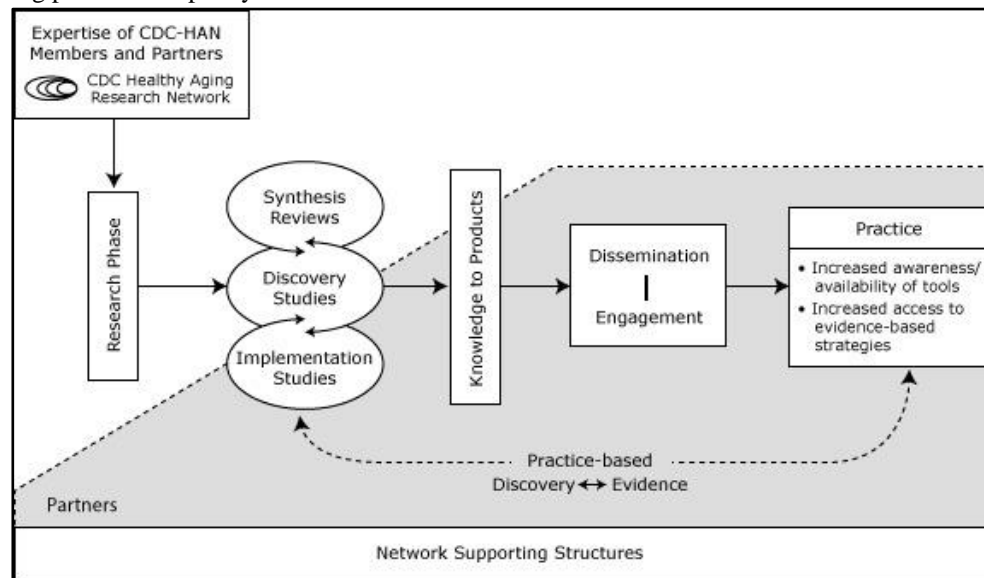


Figure 1. Knowledge Action Framework http://www.cdc.gov/pcd/issues/2011/mar/10_0012.htm.

Figure 1 explains the Healthy Aging Research Network Environmental Initiatives: Moving Knowledge to Practice. The HAN Environmental Initiatives Framework is based on the Knowledge to Action Framework as shown in Fig.1), by highlighting research, knowledge to products, dissemination, partner engagement, and practice effects. At the base of the figure, are the supporting structures of the network. Which provide a strong foundation for our work. Evaluation, while not explicitly shown, is an implicit element of supporting structures as well as the network logic model

It is essential to account for and inform network actions. The shaded area under the dotted lines portrays the expansion of partnerships over time. To the far right, the first section depicts the research phase, including developing a research agenda along with conducting synthesis reviews, discovery studies, and implementation studies. The second section shows the knowledge into products component along with dissemination and engagement. Finally, described are the effects of this work on practice and the ongoing influence of practice-based discovery and evidence on further research and dissemination.

3.3 The Han Process

Step 1: Present the activities and lessons learned from a series of environmental initiatives conducted over 10 years from the network, including our members and partners, and the supporting structures that fund and help sustain our work.

Step 2.: Describe the development of a research agenda and select applied research activities related to synthesis reviews, discovery studies, and implementation studies in order to connect how research activities led from knowledge to products and describe dissemination and engagement activities. (Note: At this point, the critical role of partners (stakeholders with a long-term focus on healthy environments).

Step 3 : Describe the effects of this work on practice, the ongoing influence of practice-based discovery and evidence on further research and dissemination, and the implications for future work.

3.4 Summary of Findings

The notable findings from the HAN studies are as follows:

Physical activity, social engagement, and a healthful diet help prevent chronic conditions and increase the longevity and quality of life of older adults. The importance of physical and social environments on human behavior and health is also well recognized. There are demonstrable cumulative environmental effects on the aging process and the health and functioning of older adults.

Practices and policies must be in place to support safe, age-sensitive, and fully accessible environments help ensure the healthiest possible aging and enable older adults to remain actively engaged in their communities. However, serious concerns exist about our preparedness to meet the challenges of population aging.

However, there is a need to address such challenges underscores the urgency to translate prevention research into action and to define and test effective ways to reach key communities of practice, not only in public health but also in disciplines such as city planning, engineering, and architecture.

Tales of Responses to Elderly Services and Management:

The responses done to Elderly Ageing Population included community education, law enforcement, encouragement of walking, and environmental assessment and modification, including physical improvements to selected routes to improve safety and walkability. The effectiveness of public health professionals, city officials, and informed citizens in making needed environmental changes was a key lesson in the power of cross-sector collaboration. (www.prc-han.org/tools-environment#envbriefs) 1. The World Health Organization (WHO). The WHO is working towards age-friendly cities in order to counter a rise in urban ageism, the World Health Organization (WHO) has been promoting age-friendly cities for nearly 15 years. Its age-friendly framework includes these goals:

Equity an accessible physical environment an inclusive social environment. Cities and towns around the world, including local councils in Australia, have begun working towards these directions.

1. The school: A Case in China

The Health Elderly Service and Management Major located in one College in China re-employs elderly and could be the new thing. The global strategy to deal with aging has also changed from healthy aging to active aging. Active aging, to a large extent, is to regard the elderly as a kind of human resource and better apply its value to daily life, such as rehiring retired people to their original posts, or letting the younger elderly help care for the elderly.

This is the case of the students majoring at Smart Health Elderly Service and Management, the school is borne under the background of the increasing aging trend in China. In recent years, China has mentioned in many policy documents that it is necessary to strongly support the development of Elderly Service and Management major in higher vocational colleges (the predecessor of Smart Health Elderly Service and Management major, which was renamed as Smart Health Elderly Service and Management major in the National Professional Directory in 2021).

In the context of the global aging trend, the Smart Health Elderly Service and Management major of our school can better adapt to the needs of social development trend, but need to advance with the signs of the time in talent training, timely adjustment and renewal.

Now, in the context of advocating the concept of active aging, more attention is paid to the elderly in addition to having a healthy body, but also need to have a positive psychological and state. In the future, the embodiment of the value of the elderly will be more prominent. Therefore, as teachers, we need to keep abreast of the latest trends in society and guide students to learn useful skills based on the latest needs.

On the other hand, it also reminds us of the need to cultivate students' innovative consciousness, innovative thinking, innovative ability, learning ability and adaptability. (Yanan Luo, Binbin Suand Xiaoying Zheng)

2. The Tourism Industry: Cloud Tourism

Because of COVID-19's transnational tourism activities and the stagnation of public service business. The company's business has decreased significantly, and the company is in a state of loss at present.

At present, due to the epidemic, the tourism business between China and the Philippines has basically stopped. However, some of our employees insist on working in the Philippines, and many Chinese in the Philippines have not returned home. This part of the tourism market is also worthy of attention. We can carry out the tourism business of local Chinese in the Philippines and drive local Chinese in the Philippines to carry out short-distance tourism. Provide them with other business services related to tourism. To increase the company's revenue and maintain the company's normal business.

The second level is to establish emerging business the FUNTOUR company can launch new tourism products, combine tourism with education industry, sports industry and health care industry, and provide corresponding tourism products by age.

Cloud Tourism. The company wants to exist for a long time, it must not only look at the present, but also plan for future development. The company needs to replace new and old businesses through market analysis, and screen out some candidate businesses to lay a foundation for future development. At present, "cloud tourism" can be used as the main candidate business in the development of the company. Although the current technology does not support this project very much, with the development of the Internet and VR industry, In the near future, people can carry out "cloud tourism" at home without leaving home. At that time, you only need to buy tourism products online, and then wear VR equipment to place yourself in the scenic spots you want to go to. Such viable candidate projects will certainly bring considerable benefits to the company in the future.

3.5 Recommendations

The physical activity programs survey and HAN audit tool projects, conducted in geographically diverse HAN sites, showed differences in community environments, particularly between those that were rural and urban. Therefore, more studies on the types of communities through related initiatives including a review of the effects of the rural built environment on adult physical activity, a review on the food environment and audit tool revisions to address rural environment features.

Findings indicated on the importance looking more on key relationships; for example, living in a residential area, compared with a mixed-use or commercial area, is associated with less time spent walking

Deeper understanding on older adults with reduced cognitive function were more likely to walk indoors than those with

higher functional levels (17), and perceived crime and reduced access to services were associated with higher body mass index (18).

Results enhanced understanding of other factors (eg, self-efficacy for walking is linked to reduction or delay of functional limitations [19]) and provided a broader research agenda on mobility. Data indicated need for improvement of pedestrian facilities to reduce hazards and barriers to walking by older adults and the need for changes in driver behavior and walking programs tailored to adults with varying fitness levels.

IV. CONCLUSION

4.1 The Future Directions

Most city planning efforts to encourage active ageing are siloed and fragmented. Older people are too often shut away in retirement villages or nursing homes rather than living in the community. Current approaches are often based on traditional deficit models of focusing on older people's declining health. Another issue is that senior citizens are treated as receivers of solutions instead of creators. To achieve real benefits, it's essential to involve them in developing the solutions.

4.2 The retirement village – the wall and what's behind it is so 2020

Smart city approaches can make urban neighborhoods more age-friendly. One way technology and better design do this is to improve access to the sort of information older Australians need – on the walkability of neighborhoods, for example.



It's useful for older people to be able to find out which walking routes have shade and places to stop and rest. (Example from Shutterstock Our research has considered three factors in ensuring smart city solutions involve older Australians and work for the:

4.3 Replace ageism with agency.

Government efforts have focused on increasing life expectancy rather than improving quality of life and independence. Ignoring quality of life leads to the perception of an ageing population as a burden to be looked after. It would be better to bring about changes that improve older people's health so they can participate in neighborhood activities. Social interaction is a source of meaning and identity.

Active participation by older adults using digital devices can give them agency in their lives and reduce the risk of isolation. Bloomberg reports older adults have become empowered using technology to overcome social isolation during the COVID-19 pandemic.

4.4 Connect to smart city data.

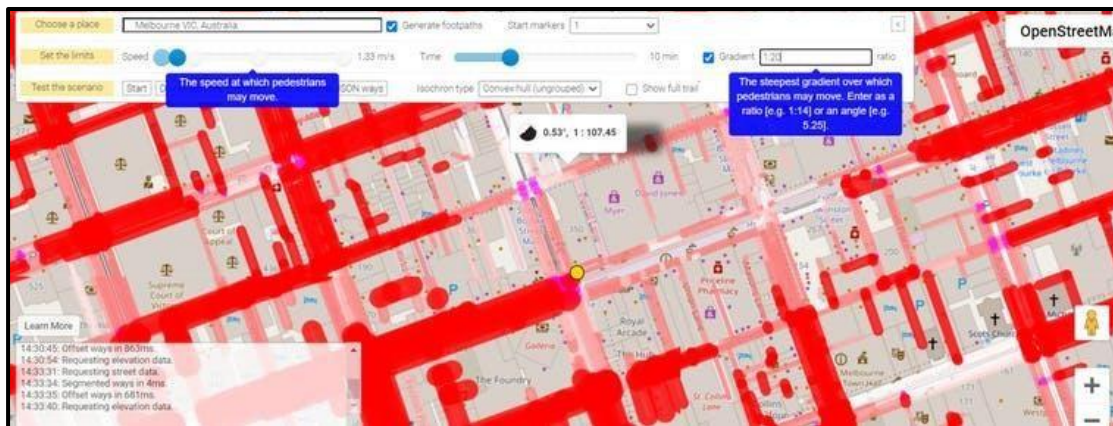
Cities are about infrastructure. Senior citizens need to have access to information about this infrastructure to be motivated to spend time in their neighborhood and reduce their risk of isolation.

Growing numbers of active ageing seniors are "connected" every day using mobile phones to interact with smart city services. Many have wearable devices like smart watches that help monitor and manage their health and physical activity.

These personal devices can also be used to better connect older adults to public data about urban environments. For example, imagine an age-friendly smart city "layer" linked to a smart watch, to highlight facilities such as public toilets, water fountains and shaded rest stops along exercise routes.

Access Map Seattle is an example of an age-friendly, interactive, smart city map that shows the steepness of pedestrian footpaths and raised kerbs. The National Public Toilet Map, created by the Australian Department of Health and Ageing, and Barcelona's smartappcity are among other mobile apps integrating city services and urban plans.

The rise of "urban observatories" has increased the gathering and analyzing of complex city-related data. These data make it possible to build a digital city layer.



Ped Catch is an app that combines animated pedestrian accessibility modelling, topographical mapping and crowd-sourced geospatial data. Marcus White, Swinburne University, Author provided
This information then helps us understand and improve the live ability of neighborhoods for older adults. The data can be used for more proactive policy and city planning.

Lastly: Elon Musk on August 13, 2021 at a press event on the grounds of the Tesla Gigafactory near Berlin. Says “people should be more concerned about the "population collapse. The SpaceX CEO has said the company will land humans on Mars in five to 10 years. Musk wants people to be more concerned about the falling birth rate. The entrepreneur shared his worries in a series of tweets following a general decline in birthrate amid the pandemic. In the US, the birth rate fell 4% from 2019 to 2020, marking the country's lowest number of births since 1979. Musk, who is the founder and CEO of space exploration company SpaceX, is aiming to put humans in a settlement on Mars. He said in a podcast last month that SpaceX will land humans on the planet with its Starship rocket in five to 10 years. But if the demographic crisis doesn't let up, there won't be enough people for Mars, Musk added that unless people have more children, "civilization is going to crumble." —Elon Musk (@elonmusk) January 18, 2022

REFERENCES

- Basia Belza, B., Altpeter, M., Hooker, P.M., & Moni, G. (2015). The CDC Healthy Aging Research Network: Advancing Science toward Action and Policy for the Evidence- Based Health Promotion Movement. *Frontiers in Public Health*.
- Hunter, R.H, Sykes, K, Lowman, S.G., Duncan, R., Satariano, W.A., Belza B. (n.d.). Environmental and policy change to support healthy aging. *J Aging Soc Policy* 2011;23(4):354–71 10.1080/08959420.2011.605642 *Public Medicine*.
- Seguin R, Lamonte M, Tinker L, Liu J, Woods N, Michael YL, et al. (n.d.). Sedentary behavior and physical function decline in older women: findings from the Women’s Health Initiative. *J Aging Res* 2012; 2012:271589. *Public Medicine*.
- Thomas, P.A. (n.d.). Trajectories of social engagement and mortality in late life. *J Aging Health* 2012;24(4):547–68 10.1177/0898264311432310 *Public Medicine*.
- The Healthy Aging Research Network Writing Group the Prevention Research Centers Healthy Aging Research Network. *Prevention of Chronic Diseases* 2006, 3(1): A17.http://www.cdc.gov/pcd/issues/2006/jan/05_0054.htm. Accessed July 19, 2012 *Public Medicine*. The Prevention Research Centers Healthy Aging Research Network. *Preventive Chronic Disease*, 2006.
- Kealey M, Kruger J, Hunter R, Ivey S, Satariano W, Bayles C, et al (2005). Engaging older adults to be more active where they live: audit tool development. *Preventing Chronic Disease* 2005;2(2). http://www.cdc.gov/pcd/issues/2005/apr/04_0142q.htm. Accessed July 5, 2012. . Healthy aging: programs that make a difference-part 1. Consultation Pharmacy, 2012. Environmental and policy change to support healthy aging. [J Aging Social Policy. 2011. Medical References
- An organizing framework for translation in public health: the Knowledge to Action Framework. *Prevention of Chronic Diseases*, 2011.
- An organizing framework for translation in public health: the Knowledge to Action Framework. *Prevention of Chronic Disease*. 2011
- Evaluating Policy, Systems, and Environmental Change Interventions: Lessons Learned From CDC's Prevention Research Centers.[Prev Chronic Dis. 2015]
- Knowledge-to-action processes in SHRTN collaborative communities of practice: a study protocol. *Implementing Scienc*. 2011.
- The Prevention Research Centers Healthy Aging Research Network. *Prevention of Chronic Diseases*, 2006.
- Neighborhood socioeconomic deprivation and minority composition are associated with better potential spatial access to the ground-truthed food environment in a large rural area. *J Nutrition*. 2008.